Please replace the "Abstract" with the following new "Abstract."

Abstract

A method of dynamic real time translation of first program code written for a first programmable machine into second program code (target code) for running on a second programmable machine employing run time generation of an intermediate representation of the first program code. Upon first encountering a given portion of program code, only the target code necessary to execute that portion of program code under a prevailing set of entry conditions is initially generated and stored. When the same portion of program code is again encountered, a determination is made as to whether intermediate representation corresponding to a second subsequent set of conditions has been generated. If not, the target code necessary to execute the same portion of program code under that second set of conditions is generated.